DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/242010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 49-52, 55-63, 66-69 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 49-52, 55-56, 58-63, 65-67 and 69 rejected under 35 U.S.C. 103(a) as being unpatentable over Hohensee et al. (US Patent Number 7,218,411 B2) and further in view of Martin et al. (US Patent Number 4,870,611).

(1) regarding claim 49:

As shown in figure 1, Hohensee et al. disclosed a method for enhancement with a print data processing computer of an input document data stream which comprises at least one input format file *as an advanced function representation (AFP) format determination resource file (formdef)* comprising format definitions and an input document data file structured in ranges and sub-ranges and containing variable data (**column 4, lines 15-24; note that the print request is accompanied by a job ticket, such as a MO:DCA Form Definition, that specifies finishing operations to be performed on the print file. the finishing operations are specified in a Form Definition using commands and parameters. The host/server 102 of the exemplary embodiment accepts the print file and job ticket, and derives a composite data stream that consists of an IPDS data stream and an encapsulated data stream that contains the printing finishing commands for the print file**), comprising the steps of:

in a control file defining finishing commands and enhancing the data stream with said finishing commands (**column 7, lines 63-67; note that the input data gets enhanced by the finishing commands. see also, column 6, lines 8-16**);

in the control file also defining levels that correspond to at least one of the ranges and the sub-ranges of the input document data file (**column 7, line 63-column 8, line 5; note that the form definition has levels corresponding to the nesting i.e. range finishing operations and the sub-portion nesting levels i.e. sub-ranges**), *said data*

*processing computer comprising a first computer program module producing a graphical user interface by which a user specifies said levels within the data stream (***column 3, lines 20-23; note that the exemplary embodiment includes one or more workstations 114 that are used by graphic designers or users with other skills to define part or all of the document to print***)*;

in the control file *also by use of said graphical user interface the user* also associating the finishing commands with the levels and registering which finishing commands are executed in which levels (**column 7, lines 63-67; note that form definition showing nesting finishing operations at different levels, also see in column 9, lines 33-34; the finishing operation is controlled by the group levels**);

in the control file also associating a first of the finishing commands with one of the ranges and associating a second of the finishing commands with one of the sub-ranges (**column 10, lines 17-33; note that the first package sub-portion is initiated by the first XOH SGO command 602 that defines the level as X`80` and the operation to be X`04`, "finishing operations.");** and

using the control file, input format file, and the input document data file, with said processing computer *automatically generating and outputting* by a second computer program module to a printing device for creating a printed document (**column 4, lines 25-32; note that the printing device receives and processes commands in order to generate the required printed output**)

an output format file as an advanced function presentation (AFP) format definition resource file (formdef) that contains the finishing commands in callable groups

(**column 9, lines 15-19; note that the IPDS Architecture provides two commands that are used to specified desired finishing operations**), and

an output document data file containing the variable data and group calls associated by at least one of range-by-range and sub-range-by-sub-range (**column 11, lines 15-30; note that the finishing command is applied by the range and sub-range group**).

Hohensee et al. disclosed most of the subject matter as described as above except for specifically teaching said control file being generated by analyzing a data structure of the input document data file and mapping said data structure into said control file; and the output format formdef file being provided with modified medium maps relative to the input formdef file.

However, Martin et al. disclosed said control file being generated by analyzing a data structure of the input document data file and mapping said data structure into said control file (**column 11, lines 7-14; note that input data set is produced by application program and processed by PSF under the control of PAGEDEF and/or FORMDEF to construct output data set**); and the output format formdef file being provided with modified medium maps relative to the input formdef file (**column 12, lines 39-47; note that the plurality of medium maps within FORMDEF enables dynamic changing of the formatting of documents. Output data set is transmitted to local memory of visual display device...this allows the same data set to be printed in various formats using the same output data set and FORMDEF**).

Hohensee et al. and Martin et al. are combinable because they are from the same field of endeavor i.e. processing data for printer. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art to have said control file being generated by analyzing a data structure of the input document data file and mapping said data structure into said control file; and the output format formdef file being provided with modified medium maps relative to the input formdef file. The suggestion/motivation for doing so would have been in order for producing diverse visual presentations based upon computer output information, in particular, printed output of diverse copies having different content (column 1, lines 33-40). Therefore, it would have been obvious to combine Hohensee et al. with Martin et al. to obtain the invention as specified in claim 49.

(2) regarding claim 50:

Hohensee et al. further disclosed a method according to claim 49 wherein the output document data file is fed to a data production system that comprises said printing device and at least one device for processing of a print product at least one of before and after a printing event (**column 5, lines 7-12; note that the printing device 106 of the exemplary embodiment interprets these pre-processing and post-processing commands and performs communications via the UP.sup.3I bus 110 that corresponds to pre-processing and post-processing commands that are contained within received IPDS commands),** and wherein the finishing commands activate at least one of the devices for processing of the print product at least one of

before and after said printing event (**column 5, lines 15-19; note that these pre- and post- processing devices are either physically incorporated within the same unit as the printing device 106, or they are connected to the printing device**).

(3) regarding claim 51:

Hohensee et al. further disclosed a method according to claim 49 wherein the data of the output format file and the data of the output document file are generated corresponding to one another with the second computer program module (**column 4, lines 12-13; note that a print file i.e. output format file, containing documents in MO:DCA format, also called Advanced Function Presentation (AFP) format, is generated on workstation**).

(4) regarding claim 52:

Hohensee et al. further disclosed a method according to claim 49 wherein at least one of said input document data stream and an output document data stream comprising said output document data file is resource-structured and comprises a page description language data stream (**column 6, lines 4-6; note that finishing operation nesting rules at the PDL level is disclosed**).

(5) regarding claim 55:

Hohensee et al. further disclosed a method according to claim 52 wherein the output document file comprises a print file with variable print data, and the second

computer program module enhances the variable data with calls of said medium maps of the output formdef file (**column 6, lines 65-67; note that each Medium Map that is to generate such finishing must specify the operation explicitly**).

(6) regarding claim 56:

Hohensee et al. further disclosed a method according to claim 49 wherein a non-resource- structured file is read in and converted into a resource-structured input data file (**column 4, lines 15-18; note that the print request is accompanied by a job ticket, such as a MO:DCA Form Definition, that specifies finishing operations to be performed on the print file**).

(7) regarding claim 58:

Hohensee et al. further disclosed a method according to claim 56 wherein the same computer program module as is used to prepare the resource-structured input file is used to convert the non-resource-structured file (**column 4, lines 15-20**).

5. The proposed combination of Hohensee et al. and Martin et al., explained in the method claims 49-52, 54-56 and 58, renders obvious the system and computer program product of claims 59, 60-63, 65-67 and 69 because the method is performed based on a system as explained in figures 1-2 and the computer program is implement as shown in figures 4-6 in order to perform the steps as discussed above. Thus, the arguments

similar to that presented above for claims 49-52, 55-56 and 58 are equally applicable to claims 59, 60-63, 66-67 and 69.

6. Claims 57 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohensee et al. (US Patent Number 7,218,411 B2) and Martin et al. (US Patent Number 4,870,611) further in view of AFP and Line Data Reference (IBM Publication S544-3884-02, see IDS).

(1) regarding claim 57:

Hohensee et al. and Martin et al. disclosed all of the subject mater as described as above except for specifically teaching a method according to claim 56 wherein the non-resource- structured file comprises a line data file.

However, AFP and Line Data Reference teaches wherein the non- resource-structured file comprises a line data file (**page 5, column 2, lines 1-4; note that line data is not already in MO:DCA i.e. resource-structure**).

Nakagiri et al., Martin et al. and AFP and Line Data Reference are combinable because they are from the same field of endeavor i.e. processing data for printer. At the time of the invention, it would have been obvious to a person of ordinary skilled in the art wherein the non- resource-structured file comprises a line data file. The suggestion/motivation for doing so would have been in order to acquire a device independent data structure (chapter 2, paragraph [0001]). Therefore, it would have been

obvious to combine Hohensee et al. and Martin et al. with AFP and Line Data Reference to obtain the invention as specified in claim 57.

7. The proposed combination of Hohensee et al., Martin et al. and AFP and Line Data Reference, explained in rejection of the method claim 57, renders obvious the system claim 68 because the method is performed based on a system as explained in figures 1-2 in order to perform the steps as discussed above. Thus, the arguments similar to that presented above for claim 57 is equally applicable to claim 68.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brossman et al. (US Publication Number 2001/0043352) disclosed flexible and extensible virtual printer architecture.

9. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore could be reached at (571) 272- 7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pari-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hilina S Kassa/

Examiner, Art Unit 2625

March 25, 2010

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625